MULTIMEDIA NAVIGATION RECEIVER

USER MANUAL
M-DL5000

Bluetooth®

MACROM

Safety Precautions

Thank you for purchasing this product. Please read through these operating instructions so you will know how to operate your model properly. After you've finished reading the instructions, keep this manual in a safe place for future reference.

Only connect the unit to a 12-volt power supply with negative grounding.
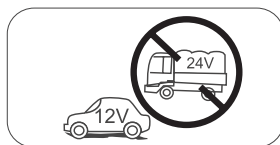

Never install this unit where the operation & condition for safe driving is impaired.
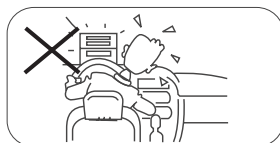

Never use the video display function in the front when driving to prevent the violation of laws & regulations and also to reduce the risk of traffic accident except for using rear view video camera.
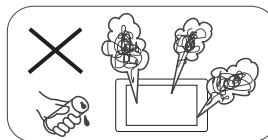

Never expose this unit, amplifier, and speakers to moisture or water to prevent electric sparks or fire.
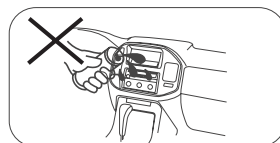
Please don't change the fuse on the power cord without professional guidance, using improper fuse may cause damage to this unit or even cause fire.
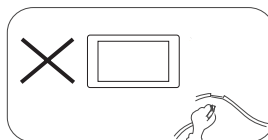
Please contact your nearest dealer if one of the following symptoms is experienced:

(a). Water or other objects enters the unit.
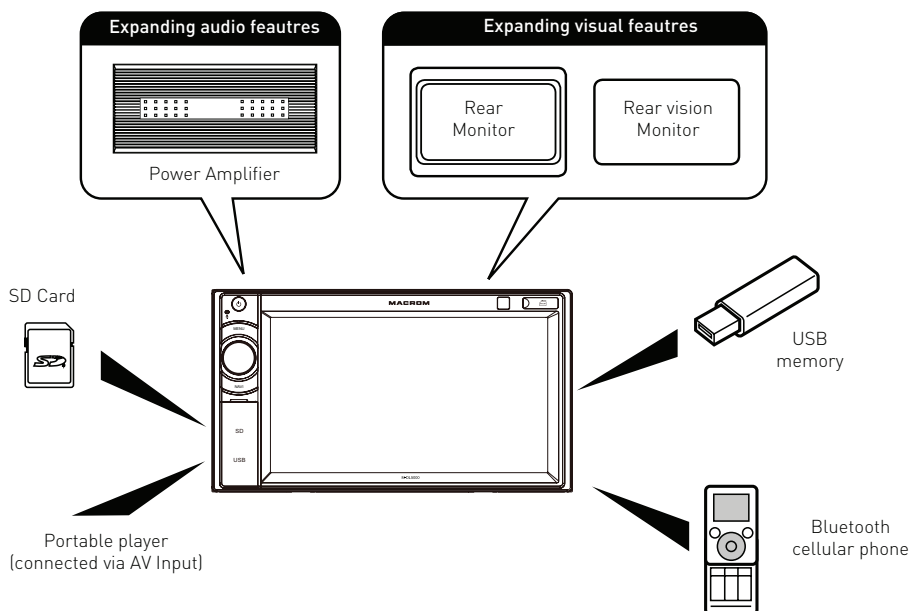(b). There is smoke.
(c). Peculiar smell.

To ensure safe driving, please adjust the volume to a safe and comfortable level in case of emergency situations.

Safety Precautions

1. Never disassemble or adjust the unit without any professional guidance.
   For details, please consult any professional car shop / dealer for inquiry.
2. If the front panel or TFT monitor is dirty, please use a clean silicone cloth and neutral detergent to wipe off the spot. Using a rough cloth and non-neutral detergent such as alcohol for cleaning may result in scratching or decoloration to the monitor.
3. If any abnormal behavior of the unit is found, please refer to trouble shooting guide of this manual. If no relevant information is found, please press the [RESET] key on the front panel to resume factory default.
4. If you have parked the car in hot or cold weather for a long time, please wait until the temperature in the car becomes normal before operating the unit.
5. Using the car heater in low temperature environment may result in moisture inside the unit, DO NOT use the unit in this situation. Eject the disc and wipe off the moisture on the disc. If the unit still doesn't work after a few hours, please contact the service center.
6. Do not impact the LCD monitor which could cause damage.
7. To prevent damage to the screen, avoid touching it with sharp objects.
8. To provide a clear demonstration and an alternative for easy understanding to the operation of this unit, graphic illustrations are used.
   However, some illustrations are different from the actual images displayed on the screen.
9. Operate the unit correctly according to this manual to prevent unnecessary problem. The guarantee won't be valid if the problem is caused by inappropriate operation.

Expanding System

Expanding audio feautres

Power Amplifier

Expanding visual feautres

Rear Monitor

Rear vision Monitor

SD Card

USB memory

Portable player (connected via AV Input)

Bluetooth cellular phone

Note:
The items listed outside of the frame are the commercial products generally sold.

Contents

Product overview

Front Panel
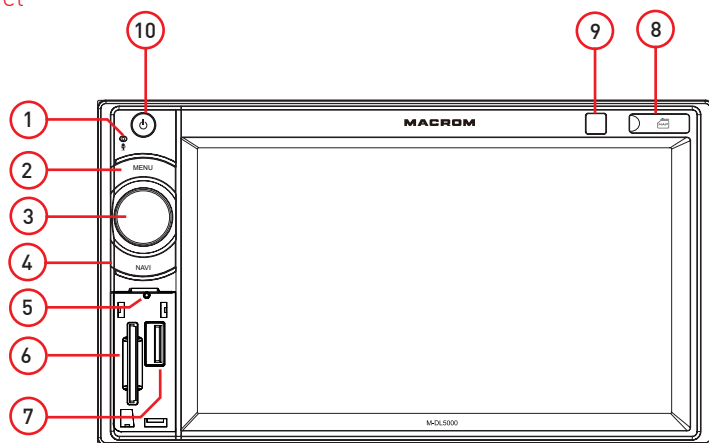
Notice:
The graphic in this manual is for reference only, and may be different from the actual unit.

1. Internal Microphone
   Internal microphone for Bluetooth calls.
2. [MENU] Button
   Press to switch between the available audio/video sources applied to the unit.
3. [VOL/ /] Knob
   Rotate to adjust the volume.
   Press momentarily to activate the MUTE function. Press again to resume normal listening.
4. [NAVI] Button
   Press to switch to navigation mode.
5. Reset Button
   Press to reset system settings to factory default (except password and parental lock settings).
6. SD card slot :
   nsert an SD card for playback of music/video/picture files.
7. USB por:
   Connect a USB device for playback of music/video files.
8. Map Slot
   The Mini SD card is used for the Navigation Map only, not for music or other files.
   This may be used for firmware updates if required.
9. Remote Sensor
10. [POWER] Button
    Press to turn the unit ON. Press and hold to turn the unit OFF.

Remote control overview

Front view
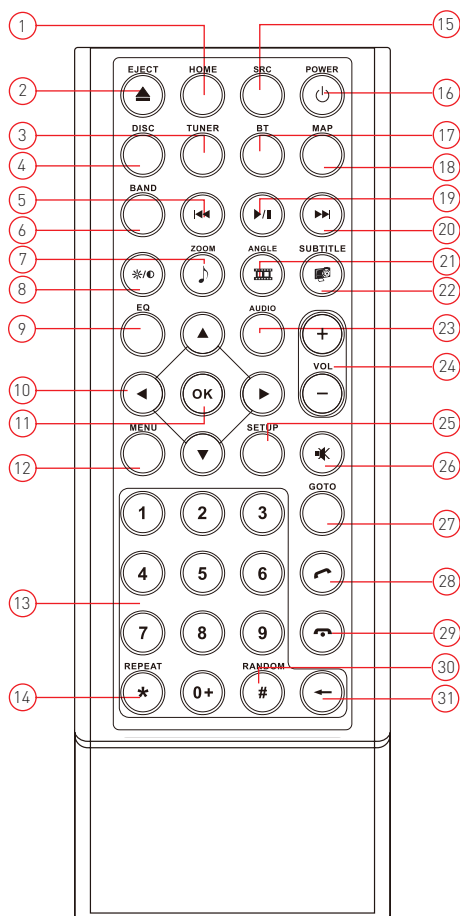
1. Return to the home menu
2. Eject the disc
3. Access to tuner source
4. Access to disc source
5. Search an available radio station by decreasing tuning frequency
    Select the previous chapter/track for playback
6. Select radio band
7. Zoom in (Picture menu)
    Access to music list
8. Adjust screen settings
9. Open EQ menu
10. Menu cursor
11. Enter
12. Open route menu (DVD)
    Turns on/off PBC (VCD)
13. Digit area
14. Repeat playback
15. Change to next source
16. Power on/off
17. Access to Bluetooth source
18. Access to navigation source
19. Pause playback/Start playback
20. Search an available radio station by increasing tuning frequency
    Select the next chapter/track for playback
21. Playback disc in different angle for a scene (DVD)
    Rotate (photo playing)
    Access to video list
22. Language selection for subtitle (DVD)
    Access to photo list
23. Change the audio language for disc playback (DVD)
24. Increase/Decrease volume
25. Access to settings source
26. Mute on/ off audio output
27. Activate direct access mode
28. Dial/Receive a call
29. Hang up
30. Play all chapter/tracks in random order
31. Press to clear the number one by one
    Hold to clear all the numbers

Note:
The following keys 2,4,7,21,22,23, are for the disccontrol function.
Ignore these keys to the 'M-DL5000.

Remote battery

Notes of remote control using

1) Aim the remote control at the remote sensor on the unit.
2) Remove the battery from the remote control or insert a battery insulator if the battery has not been used for a month or longer.
3) DO NOT store the remote control under direct sunlight or in high temperature environment, or it may not function properly.
4) The battery can work for 6 months under normal condition. If the remote control can't work, please change the battery.
5) Use¨button shaped¨ lithium battery¨CR2025¨(3V) only.
6) DO NOT recharge, disassemble, heat or expose the battery in fire.
7) Insert the battery in proper direction according to the (+) and (-) poles.
8) Store the battery in a place where children cannot reach to avoid the risk of accident

Back view

Uninstall Battery
Slide out the battery compartment tray at the bottom on the back of the remote control.

Install Battery
Use button-shaped lithium battery CR2025 (3V)¨ only. Insert the battery to the battery tray with proper direction according to the (+) and (-) poles.
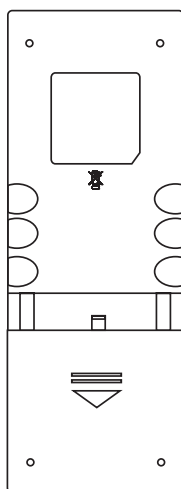
PULL OUT
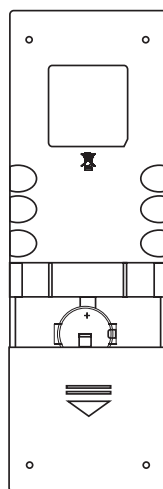
PUSH IN

Basic Operations

Detect parking brake
- Connect the cable "BRAKE" to the parking brake switch to view video files on the TFT monitor. Engage the parking brake for viewing videos.
- When the parking brake is not engaged, the monitor displays "Warning!!!, Video playback is disabled for your safety. Engage parking brake to watch video.", preventing the driver to watch content while driving. The rear screens are not interested in this inhibition.

Mute
Press [VOL/⏻/🔇] knob to mute the volume from the unit. Press again to restore the volume. [🔇] is displayed on the LCD. Adjusting the volume or using any of the audio setup features cancels the mute function.

Power On / Off
Press the [VOL/⏻/🔇] knob on the unit to turn the unit on. The buttons on the front of the unit light up for a moment and the current mode status appears in the LCD.
Press and hold the [VOL/⏻/🔇] knob to power off the unit.

Audible Beep Confirmation
An audible beep tone confirms each function selection. The Beep tone can be disabled through the Setup menu.

Playing Source Selection
Press the [MENU] button on the front panel to change between available playing sources. The playing mode is displayed on the screen.
1. 1/2 or 2/2: Touch this page button to view the first or second page of on-screen buttons
2. Function icons
3. Clock
4. Touch for quick access to Equalizer level settings

Audio control

EQ Menu
The Audio Control feature allows you to easily adjust your audio system to meet the acoustical characteristics of your vehicle, which vary depending on the type of vehicle and its measurements. Proper setting of the Fader and Balance boosts the effects of the cabin equalizer.
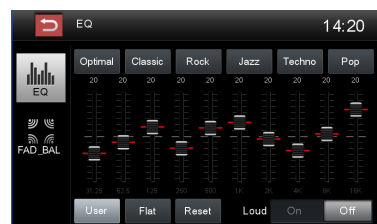
Select Preset Equalizer
1. Enter the EQ setup mode
   Touch the [📊] icon in the user interface and the EQ setup interface will display on the screen.
2. Select EQ mode
   Touch the desired EQ selection: [Optional] / [Classic] / [Rock] / [Jazz] / [Techno] / [Pop], and the EQ mode will change.

Adjust EQ Parameters
To adjust EQ parameters, touch and drag the parameters adjustment bar.

[User]: Set the desired audio effect.
[Flat]:   Select the original audio effect.
[Reset]: Cancel the equalizer function settings.
[Loud: On/Off]: When listening to music at low volumes, this featurewill selectively boost certain bass and treble frequencies.

Adjust FAD BAL
You can adjust front/back/left/right balance of the speaker and the subwoofer volume to get balanced listening effect according to the surroundings and your interest.

1. Enter the EQ setup mode
   Touch the [🔊] icon in the user interface and the EQ setup interface will display on the screen.
2. Adjust subwoofer volume
   Touch [▲] / [▼] or drag [📊] to adjust subwoofer volume from -12 to +12.
3. Adjust fader / balance value
   Touch [▲] / [▼] / [◀] / [▶] to adjust fader / balance value from -20 to +20.
   [▲]: Front speaker
   [▼]: Rear speaker
   [◀]: Left speaker
   [▶]: Right speaker
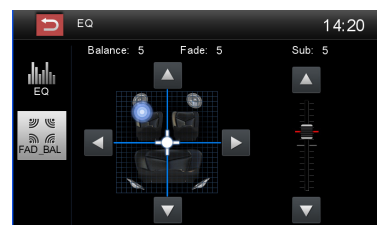
Notes:
1. The parameters of the EQ modes has been preset and you can not change them besides 'User'.
2. The EQ mode will change to 'User' automatically when you adjust the frequency value under the modes besides 'User'.
3. The value of Sub is independent of EQ mode and can be adjusted separately.

Setting Date /Time

1. Touch [Settings].
2. Touch [Time].
   The date/time setup menu is displayed.
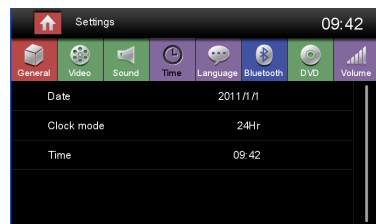
Set Date
1. Touch [Date].
2. Touch the date information on the screen .
   A submenu is displayed.
3. Touch [▲] or [▼] to set year, month and day.

Set Clock Mode
1. Touch [Clock mode].
2. Touch [12Hr] or [24Hr] to switch clock mode.

Set Time
1. Touch [Time].
2. Touch the time on the screen, a submenu is displayed.
3. Touch [▲] or [▼] to set hour and minute.

Radio Mode

Tuner TFT Display

1. Touch to view the MENU and select a new playback source
2. Strong Local signal broadcasting indicator
3. Stereo broadcasting indicator
4. Current radio band indicator
5. Broadcaster information stored at the preset
6. Touch to view more on-screen buttons
7. Touch to seek backward
8. Touch for quick access to EQ level settings
9. Touch to seek forward
10. Touch to change between AM/FM bands
11. Clock
12. Current preset radio station
13. Current radio information
14. AF: Alternative Frequency indicator
15. TA: Traffic Announcement indicator

16. RDS setting options
17. Save the desired radio station
18. Touch to change between Local and Distance
19. Enter frequency directly
20. Search stations automatically
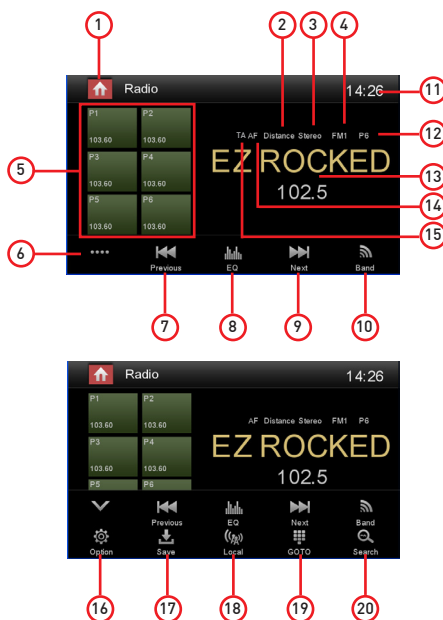
Select Radio as Playing Source
Open the Source Menu and then touch [Radio].

Select One Radio Band
Touch the [⌖] icon on the user interface to select one radio band among FM1, FM2, FM3, AM1 and AM2.

Tune the radio
Auto Tunig
During auto tuning, the frequency will be changed in seek mode.
Touch the [⏮] / [⏭] icon on the user interface to tune in a higher / lower station.
Note: When a station is received, searching stops and the station is played.

Manual Tuning
Method 1:
Touch and hold [⏮] / [⏭] icon on the user interface more than 1 second to changed in steps higher / lower station. Repeat the operation to change step by step.

Method 2:
1. Touch the numeric keypad icon [⌗].
   Numeric keyboard is displayed, touch number to input frequency.
2. Touch [⌫] to delete the input number step by step.
3. Touch [OK] to enter.

Radio Mode

Preset Station
The unit has 5 bands, such as FM1, FM2, FM3, AM1, AM2, and each band can store 6 stations; the unit can store 30 stations in total.

Search Stations Automatically
Touch [🔍] to search station and store 6 strongest stations in current band automatically.

Manual Store
1. Tune to a station.
2. Touch [⬇].
3. Touch one of the channels P1 to P6 to save the select band.
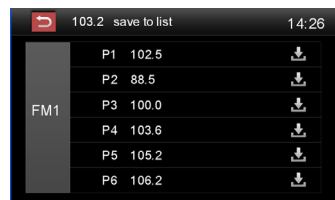
Tune to a Preset Station
1. Touch [Radio].
2. Select a band (if needed).
3. Touch one of the preset channels (P1 to P6) on the screen.

Local Seeking
Touch the [📡] icon and choose the Radio Local or Distance.
When the [📡] icon turns bright, only stations with a strong signal strength will be detected . Default is "Distance".

EQ Selection
Press the [📊] icon and enter the EQ setup.

RDS Basics
RDS transmits data to the radio which displays information such as name station, song artist, and song title.
RDS service availability varies with areas.

Adjust RDS Settings
1. In Radio menu, touch [⚙].
   The option menu is displayed.
2. Touch on the selected option to change the setting.
   [RDS]: To turn on or off "RDS" function.
   [CT]: To turn on or off "Clock Time" synchronization function.
   [EON]: To turn on or off "EON" function.
   [TA]: To turn on or off "TA" function.
   [PTY]: To show PTY list.
   [VOL]: Touch [◀] / [▶] to adjust TA volume.

Radio Mode

RDS (Radio Data System)

The unit provides basic functions of RDS.
RDS service availability varies with areas. Please verify if RDS service is available in your area.

AF Function

Alternative Frequencies Lists are used in conjunction with the PI code (Program Identification code)to assist automatic tuning.
Using this information, the radio can automatically search out another frequency of the same station.

Note:
- During auto switching radio frequency, some interference may be heard..
- Turning off AF function can settle this problem.

EON (Enhanced Other Networks)

When EON data is received, the EON indicator lights and the TA and AF functions are enhanced.
TA: Traffic information can be received from the current station or stations in other network.
AF: The frequency list of preset RDS stations is updated by EON data. EON enables the radio to make fuller use of RDS information. It constantly updates the AF list of preset stations, including the one that currently tuned into.

TA Function

The TA (Traffic Announcement) function lets the unit receive traffic announcements automatically.
The TA function can be activated by a TP (Traffic Program) station broadcasting traffic information.
When TA is activated and a traffic announcement is received, the current playing source will be overridden by the traffic announcement The unit returns to the original source after the traffic announcement has been received.

CT (Clock Time)

Some stations broadcast the time and date within the encoded RDS signal. The clock time is automatically adjusted when 'CT' is set to 'ON'.

PTY Function

PTY is an abbreviation for the type of program defined by a code to define the program being broadcast (eg news or Rock).
The Options of PTY is displayed on the screen. To see the options PTY, tap the scroll bar and arrows on the screen.
When an option is selected PTY (eg News), the radio unit, the PTY search available. If the PTY requested was not found, the unit returns to the original radio frequency.

Playback Mode

Touch Screen Controls
The touch key areas for playback are outlined below:
    A: Return to the main menu
    B: Play the video and display playback information
    C: Display onscreen control menu
    D: Time display

```
┌─────┬───────────────┬─────┐
│  A  ┊       B       ┊  D  │
│     └┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┘     │
│                           │
│┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄│
│             C             │
└───────────────────────────┘
```
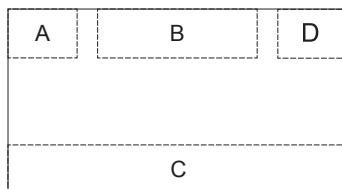
Controlling Playback
To access the on-screen controls, touch the screen except upper left corner, and touch again to cancel display. Touch [••••] to view all function icons.

Connect a USB Device
1. Open the USB door.
2. Insert the small end of the USB cable to mini USB socket, then connect the other end of the cable to your USB device.

Remove a USB Device
1. Select other source on the main menu.
2. Remove the USB device.

Insert a SD/MMC Card
1. Open SD/MMC card cover.
2. Insert the SD/MMC card into the SD/MMC card slot.
    Play starts automatically.

Remove a SD/MMC Card
1. Select other source on the main menu.
2. Press the SD card to remove it.

Play/Pause
1. Once USB or SD/MMC card is inserted, play starts automatically.
    For movie, if a menu appears, press [▶] to start play.
2. To pause, touch [❙❙].
    To resume play, touch [▶].
3. Skip to previous / next track / chapter, press [◄◄] / [►►|] key.

Previous/Next
Touch [◄◄] / [►►|] key on the screen to skip to previous / next track / chapter.

Playback Mode

Search for a Folder

For Audio Files
1. Touch [♪] to display all available audio folders.
2. Touch a folder,then touch the desired file.
3. Touch the file again to start play.

For Video Files
1. Touch [▦] to display all available video folders.
2. Touch a folder,then touch the desired file.
3. Touch the file again to start play.

For Picture Files
1. Touch [🖼] to display all available picture folders
2. Touch a folder,then touch the desired file.
3. Touch the file again to start play.

For Folder Control
1. Touch [🔍] to display all available folders
2. Touch a folder,then touch the desired file.
3. Touch the file again to start play

SD   12:35
For you
I am your angel
Because I love you
Close your eye
My heart will go on

SD   12:35
Video 1
Video 2
Video 3
Video 4
Video 5

SD   12:35

USB   12:35
For you
I am your angel
Because I love you
Close your eye
My heart will go on
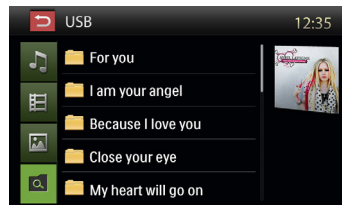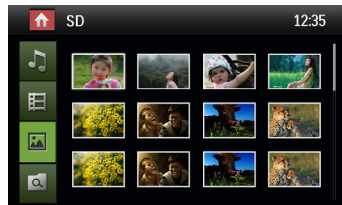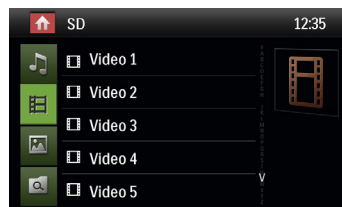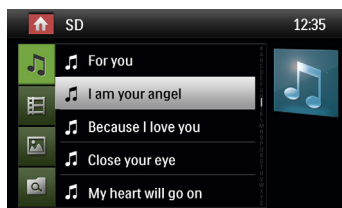
Playback Mode

Repeat
For MP3/WMA files:
1. Touch anywhere except the upper left corner to display menu on the screen.
2. Touch [⇄] repeatedly:

   [⇄] Repeat single: Play the current single repeatedly.

   [⇄] Repeat all: Play all in the all repeatedly.

   [⇄] Repeat off: Cancel repeat play.

Shuffle (Random) Play
You can play audio tracks/files in random order.
1. Touch the screen to display control menu, if necessary.
2. Touch [••••] to display the 2nd menu, if necessary.
3. Touch [⤬] on the screen repeatedly to turn random play on or off.

Playback Mode

Playback Information

For USB/SD
1. Device type.
2. Track information. "1/2" indicates that this USB has 2 tracks and the track playing back now is the first title.

F - USB   1/2   ‖   ⇄   00:04

Elapsed Time

1. Elapsed time of the current track.
2. Total time of the current track.

00:01:20   00:30:17

①   ②

Direct Track Entry

To select a track directly, touch the [⊞] icon on screen control to display the direct entry menu. Enter the desired track using the on-screen number pad. Press [OK] to the selected track.

Chapter ▾		---/012		
1	2	3	4	5
6	7	8	9	9
⌫				OK
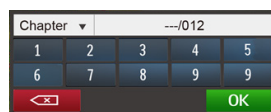
Rotate Pictures
1. When you view pictures, touch the screen to display menu on the screen, if necessary.
2. Touch [••••] to display the 2nd menu.

3. Touch [◣↻] repeatedly to rotate the picture.

Zoom
You can zoom in pictures for a close view.
1. When you view pictures, touch the screen to display menu on the screen, if necessary.
2. Touch [••••] to display the 2nd menu.
3. Touch [🔍] repeatedly to zoom in the picture.

Video Setup
Touch [✳] to access video setup mode, touch [+] or [−] to set the desired effect.

☼ Brightness	−		+
◑ Contrast	−		+
◐ Saturation	−		+
● Hue	−		+

Bluetooth Mode

You can make or receive phone calls with Bluetooth-enabled phones through the unit. You can also listen to music from a Bluetooth-enabled device.

Pair the Bluetooth-enabled Devices

To connect your Bluetooth device to the unit, you need to pair the device to the unit. Pairing needs only to be done once. You can pair up to five devices.

1. Turn on the Bluetooth function on the device.
2. Touch [🔲] to search for Bluetooth device with the unit.
3. Start scanning on the Bluetooth device and select the unit "M-DL5000"
4. Enter default password "0000".
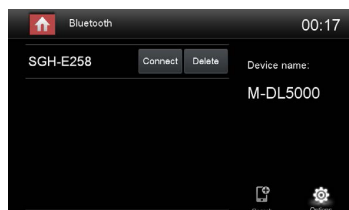
Tip:
• The operational range between this unit and a Bluetooth device is approximately 5 meters .
• Before you connect a Bluetooth device to this unit, familiarize yourself with the Bluetooth capabilities of the device.
• Compatibility with all Bluetooth device is not guaranteed.
• Any obstacle between this unit and a Bluetooth device can reduce the operational range.
• Keep this unit away from any other electronic device that may cause interference.

Disconnect Bluetooth Device

To disconnect one device, touch [🔗] .

Tip
• The device will also be disconnected when the device is moved beyond the operational range.
• If you want to reconnect the device to the unit, place it within the operational range.
• If you do not want to reconnect the device to the unit automatically, touch [⚙],
  then set [Auto connect] to [Off]. For details, see the "Adjust Bluetooth Settings" section.

Make a Call

1. Select Bluetooth function in the home menu.
2. Pair the phone with the unit.
3. Search for phone number from the following list:
   [Phone Book]
   [Call Log]
   [Missed calls]
   [Received calls]
   [Dialed calls]
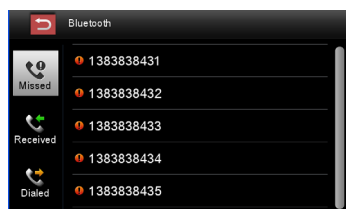
Or touch the number pad directly, then touch [📞] to dial.
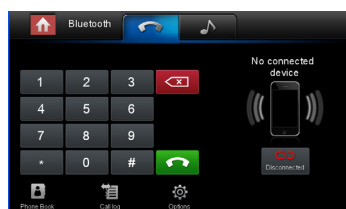
Bluetooth Mode

Receive a Call

By default, all incoming calls are received automaticaly.
1. If there is an incoming call, the screen will appear "Incoming".
2. You may touch the screen to select [hang up] or [Answer].

Tip
• You can select to receive calls manually by set [Auto answer] to [Off] status.
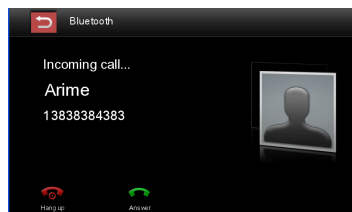
Adjust Bluetooth Settings

1. In Bluetooth menu,touch [⚙].
   The option menu is displayed.

2. Touch on the selected option to change the setting.
· [Bluetooth]: To turn on or off "Bluetooth" function.
· [Auto connect]: To turn on or off "Auto connect" function.
· [Auto answer]: To turn on or off "Auto answer" function.
· [Pairing code]: To set paring code.

· [Phone book sync]: To synchronize phone book, touch [OK] on the sub-menu popped out.
   Phonebook sync may take several minutes to load on initial setup.
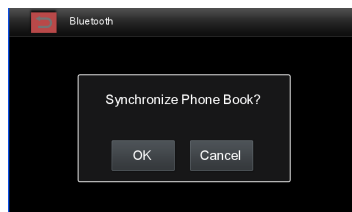
Tip
• You can also adjust Bluetooth settings in the "Settings" menu.

Bluetooth Music Mode

A2DP

A2DP is short for Advanced Audio Distribution Profile. The mobile phones supporting this function can transmit stereo audio, whereas the ones not supporting this function can transmit mono audio only.

AVRCP

AVRCP is short for Audio/Video Remote Control Profile. The mobile phones supporting this function can control the playback of a Bluetooth audio player.
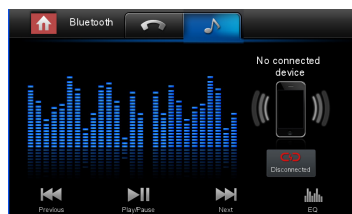
In the mode of the music player working, if you want to make a phone call, you can press the number keys on the mobile phone. At the same time the music player will stop. The TFT screen will display "Calling", after the call received, the voice will be transferred to the unit. When the call ends, the screen will display music playing menu.
If there is an incoming phone call, the music player will stop, and the screen will display "Incoming". When the call ends, the screen will display music playing menu.

Settings

General Settings

1. Touch [General] in the settings page.
2. Touch to highlight a setting.
3. Touch on the option to display/select an option.
4. Touch [⮌] or press the Menu button on the front panel to exit.

General settings	Options	Description
Radio region	USA	Select one that matches your location.
	China	
	Japan	
	Europe	
	Europe (LW)	
	OIRT	
Radio range	Local	
	Distance	
Blackout	Off/10s/20s	
Dimmer mode	Low/Medium/Normal/High	Adjust the display brightness.
Beep	On	Turn on the beep sound. Each time you press a button, the unit beeps.
	Off	Turn off the beep sound.
Calibration	Start	Calibrate the touch screen.

Calibration

When the touch operation is not sensitive or valid, you should calibrate the touch screen through calibration setting function. Adjust the response positions of the touch panel as followings:

1. Press the [Calibration] option on the setup menu to enter.
2. Touch [Start] to enter.
3. Aim at center of [+], follow the path as shown of the figure, after steps from 1 to 5, touch anywhere on the screen to save and exit from calibration. Or wait for 30 seconds to exit without making changes.
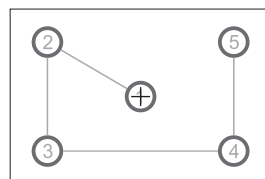
Video Settings

1. Touch [Video].
2. Touch an option repeatedly to select:
3. Touch [⮌] or press the Menu button on the front panel to exit.

Video settings	Options	Description
Detect parking brake	On	Disable video
	Off	Enable video

When detect parking brake is set to¨On¨ , the screen will display [Warning!!!¨ Video playback is disabled for your safety. Engage parking brake to watch video] The above warning screen will prevent the driver watching images.

Settings

Sound settings

1. Touch [Sound].
2. Touch an option repeatedly to select:
3. Touch [⟲] or press the Menu button on the front panel to exit.

Sound settings	Options	Description
Subwoofer	On	Turn on the subwoofer.
	Off	Turn off the subwoofer
Subwoofer filter	80Hz	Select subwoofer filter criteria.
	120Hz	
	160Hz	

Time settings

1. Touch [Time].
2. Touch an option repeatedly to select:
3. Touch [⟲] or press the Menu button on the front panel to exit.

Time settings	Options	Description
Date	Y/M/D	Touch [▲] or [▼] to set year, month and day.
Clock	12Hr/24Hr	Touch [12Hr] or [24Hr] to switch clock mode.
Time	H / M / A M / PM	Touch [▲] or [▼] to set hour and minute. Touch [▲] or [▼] to set AM/PM (only for 12Hr).

Language settings

1. Touch [Language].
2. Touch an option repeatedly to select.
3. Touch [⟲] or press the Menu button on the front panel to exit.

Language settings	Description
OSD	Select on-screen display language.

Bluetooth settings

1. Touch [Bluetooth].
2. Touch an option repeatedly to select.
3. Touch [⟲] or press the Menu button on the front panel to exit.

Bluetooth settings	Options	Description/Note
Bluetooth	On	Turn on the Bluetooth function.
	Off	Turn off the Bluetooth function.
Auto connect	On	If the pre-paired device is within the effective range, the unit re-connects to pre-paired device automatically.
	Off	Need to re-connect manually.
Auto answer	On	Answer paired phone call automatically.
	Off	Answer phone call manually.
Pairing code		Set the password for pairing the unit with other Bluetooth device.
Microphone	Internal or External	Before setting, make sure that the external microphone is installed.

Settings

Reset
1. Touch [Reset].
2. Touch an option repeatedly to select.
3. Touch [⏎] or press the Menu button on the front panel to exit.

Reset settings	Option	Description
Load Factory	Reset	Restore to default settings.

Volume settings
You can set different volume for different modes.
1. Touch [Volume].
2. Touch on a source.
   [F-USB]   [AV-IN]
   [SDHC]   [Navigation]
   [Radio]   [R-USB]
   [Bluetooth]
3. Touch [▲] or [▼] to assign value: -6 to 6.
   When switching to the source, the volume increases or decreases automatically.
4. Touch [⏎] or press the Menu button on the front panel to exit.

Other Modes

Other Devices
You can connect an external audio/video device to the unit.
1. Connect the external device with the supplied AV cable.
2. Touch the upper left corner to display the main menu.
3. Touch [AV-IN] to access external device.

Reset
When the unit hangs up, you can reset it.
Press [RESET] with a ball-point pen or similar tool.

Tip:
When the unit has been reset, all the settings will return
to default settings.

Reset
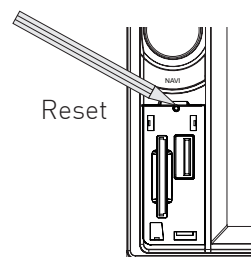
Replace a Fuse
If there is no power, the fuse may be damaged and need to be replaced.
1. Take out the unit from dashbpard.
2. Check all electrical connections.
3. Buy a fuse that matches the amperage of the damaged fuse.
4. Replace the fuse while the units power is disconnected.

Navigation (GPS)
1. Touch the upper left corner to display home menu.
2. Touch [Navigation], to start the navigation software.
3. For instructions on using of navigator, refer to the manufacturer's user manual.

Nota:
While Navigation is running, you can view the previously selected source by holding the [MENU]
button. Press again and hold the [MENU] button to return to the navigation mode.
Where it was used the Bluetooth function you can display the navigation following the procedure
described above.

Steering Wheel Control Programming
1. Touch the upper left corner to display home menu.
2. Touch [SWC], the SWC menu will display.
3. Select the keys corresponding to the functions of steering wheel controls by tapping the KEY and
   define the desired function.
4. Touch [Pair] to program.
5. Press each individual steering wheel control button for each corresponding function.
6. Once the final steering wheel control button is programmed, the functions are saved and the
   programming will end.
7. Touch [Reset] to reset the programming.

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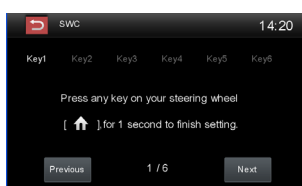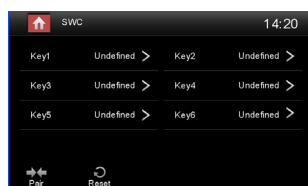
Specifications

GENERAL
 Reference Supply Voltage .... 12V(DC)
 Operating Voltage Range .... 10.5 - 15.8V(DC)
 Max Operating Current... 15A
 Grounding System .... Car Battery Negative Pole
 Dimensions(WXHXD) 178X101.5X160.5mm
 Weight(main unit) 1.28kg
FM
 Signal Noise Ratio ....≥55dB
 Residual Noise Sensitivity (S/N=30dB) 18dBµV
 Frequency Response (±3dB) .... 20Hz~12.5KHz
 Station Seeking Level ....20~28dBµV
 Distortion .... ≤1.0%
 Stereo Separation (1KHz)...≥25dB
 Antenna Impedance..75Ω
AM
 Residual Noise Sensitivity (S/N=20dB) 30dBµV
 Selectivity (±9KHz) ....≥50dB
LCD
 Screen size... 6.2 inches(16:9)
 Display resolution.. 800X480dots
 Contrast radio... 400
 Brightness 280cd/m2
OUTPUT
 Distortion (line out).. ≤0.1%
 Frequency Response (±3dB) .... 20Hz~20KHz
 Maximum Output Power... 4×45W
 Load Impedance 4Ω
AUX IN
 Distortion .... ≤0.5%
 Frequency Response (±3dB) .... 20Hz~20KHz
 Audio Input Level 1Vrms
Audio
 Audio Output Impedance..100Ω
 Audio Output Level ....2Vrms(Max)
Video
 Normal Video Input Level (CVBS) ....1.0±0.2V
 Video Input Impedance...75Ω
 Video Output Impedance 75Ω
 Video Output Level...1.0±0.2V
Environment
 Operating Temperature...-10°C ~ +60°C
 Storing Temperature...-20°C ~ +70°C
 Operating Humidity... 45%~80%RH
 Storing Humidity.. 30%~90%RH

Notice:
When the unit is operated to extremes, such as with maximum power output for a long time, or the temperature is over 70°C, it will enter heat protection mode, the volume will be reduced automatically. This is normal.

Specifications

Supported Formats:
• USB or memory file format: FAT16,FAT32
• Mp3 bit rate(date rate): 32-320 Kbps and variable bit rate
• Directory nesting up to a maximum of 8 levels
• Number of albums/folders: maximum 99
• Number of tracks/titles: maximum 999
• ID3 tag v2.0 or later
• File name in Unicode UTF8(maximum length:128 bytes)

Unsupported Formates:
• Empty albums:an empty album is an album that does not contain MP3 files,and is not be shown
  in the display.
• Unsupported file formats are skipped.For example,Word documents(.doc) or
  Mp3 files with extension.dlf are ignored and not played.
• AAC,WMV,PCM audio files
• DRM protected WMA files(.wav,.m4a,.m4p,.mp4,.aac)
• WMA files in Lossless format

Supported MP3 format:
• ISO9660,Joliet
• Maximum title number: 512(depending on file name length)
• Maximum album number: 255
• Supported sampling frequencies: 32kHz,44.1kHz,48kHz
• Supported Bit-rates: 32-320Kbps and variable bit rate

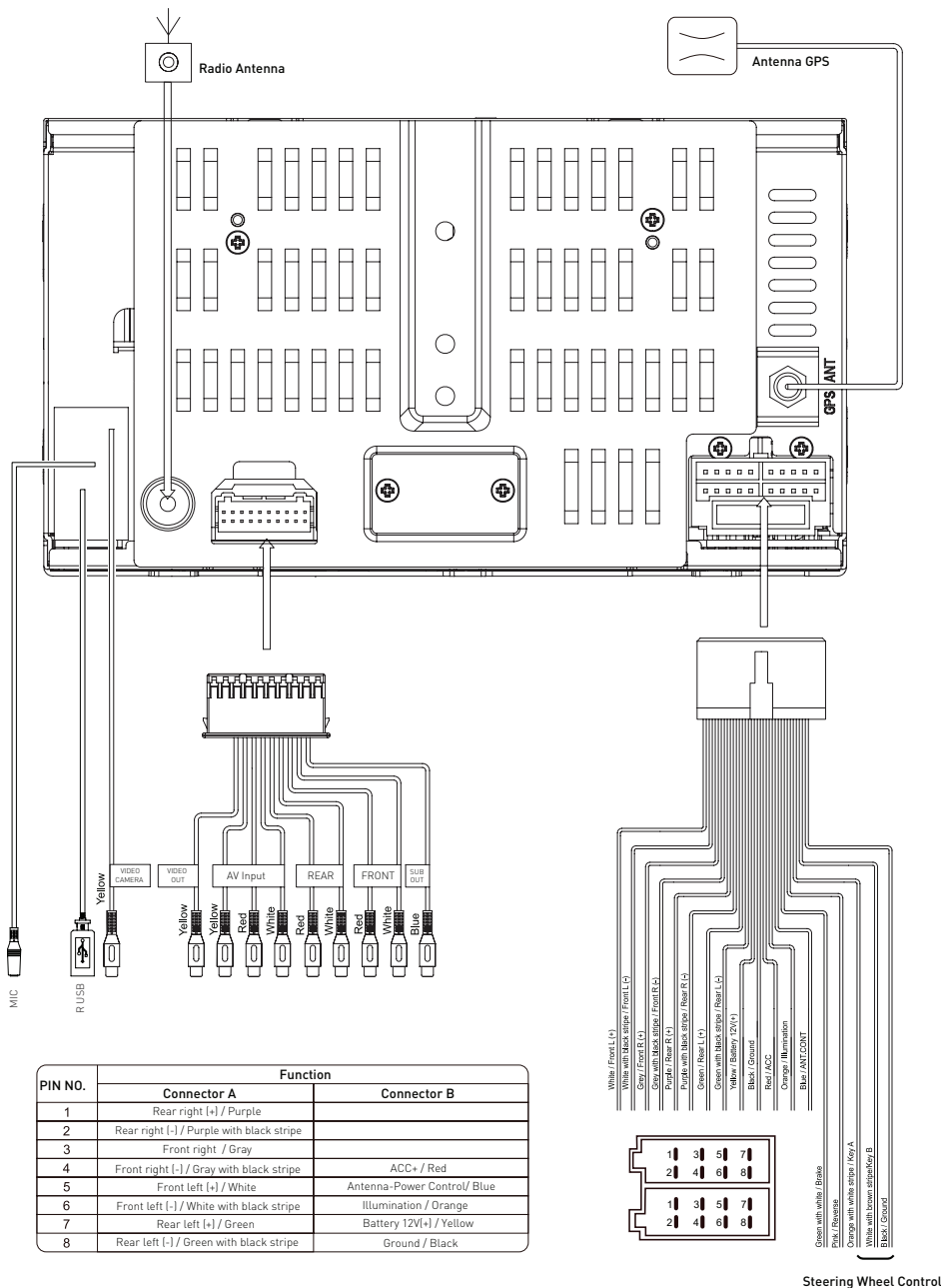Supported Video Formats:
• MP3
• DivX

Troubleshooting

What appears to be trouble is not always serious. Please check the following points before calling a service center.

Problem	Cause	Corrective action
	General	
Unit can not power on	Unit fuse blown.	Install new fuse with correct rating.
	Car battery fuse blown.	Install new fuse with correct rating.
	Illegal operation	Reset the unit.
No/low audio output	Improper audio output connection.	Check wiring and correct.
	Volume set too low.	Increase volume level.
	Speakers damaged.	Replace speakers.
	Heavily biased volume balance.	Adjust the channel balance to center position.
	Speaker wiring is in contact with metal part of car.	Insulate all speaker wiring connections.
Poor sound quality or distortion	Pirated disc is in use.	Use original disc.
	Speaker power rating does not match unit.	Replace speakers.
	Wrong connections.	Check wiring and correct.
	Speaker is shorted.	Check wiring and correct.
Unit resets itself when engine is off	Incorrect connection between ACC and BATT.	Check wiring and correct.
	TFT monitor	
Warning information is shown at all times	Parking break wiring is not correct.	Check wiring and correct.
Flashing image or interference appears on screen	The color system of DVD disc does not match the monitor.	Adjust the color system of the DVD disc playing back or the monitor in use.
	Pirated disc is in use.	Use original disc.
	Video cable damaged.	Replace cables.
	Improper video signal connections.	Check wiring and correct.

Wire Connections

Radio Antenna

Antenna GPS

GPS   ANT

Yellow

MIC   R USB

VIDEO CAMERA | VIDEO OUT | AV Input | REAR | FRONT | SUB OUT

Yellow | Yellow | Yellow | Red | White | Red | White | Red | White | Blue

White / Front L (+)
White with black stripe / Front L (-)
Gray / Front R (+)
Gray with black stripe / Front R (-)
Purple / Rear R (+)
Purple with black stripe / Rear R (-)
Green / Rear L (+)
Green with black stripe / Rear L (-)
Yellow / Battery 12V(+)
Black / Ground
Red / ACC
Orange / Illumination
Blue / ANT.CONT

Green with white / Brake
Pink / Reverse
Orange with white stripe / Key A
White with brown stripe/Key B
Black / Ground

| 1 | 3 | 5 | 7 |
| 2 | 4 | 6 | 8 |

| 1 | 3 | 5 | 7 |
| 2 | 4 | 6 | 8 |

Steering Wheel Control

PIN NO.	Function	
	Connector A	Connector B
1	Rear right (+) / Purple	
2	Rear right (-) / Purple with black stripe	
3	Front right / Gray	
4	Front right (-) / Gray with black stripe	ACC+ / Red
5	Front left (+) / White	Antenna-Power Control/ Blue
6	Front left (-) / White with black stripe	Illumination / Orange
7	Rear left (+) / Green	Battery 12V(+) / Yellow
8	Rear left (-) / Green with black stripe	Ground / Black

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Declaration of Conformity

ALDINET S.p.A
Viale C. Colombo, 8 - 20090 Trezzano s/N (MI) - Itlaly
Tel. +39 02 484781

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